Date: Wed, 2 Jun 93 18:05:58 PDT
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #673
To: Info-Hams

Info-Hams Digest Wed, 2 Jun 93 Volume 93 : Issue 673

Today's Topics:

 Advice on teaching an 8 year old (2 msgs)
 Buying radios without a license
 Call Sign Server, Where?
 Generate SSB using combined AM/FM?
 HTX-202 mods
 IC 271/471 vs IC 275/475 Performance Question
 radar gun license
 Readership Report for the Radio-Related Usenet Newsgroups
 Splatter (was: Signal report etiquette)
 VCO design questions
 Velocity of light (2 msgs)

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 2 Jun 1993 20:54:05 GMT
From: dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!gatech!concert!
samba.oit.unc.edu!cheech@network.UCSD.EDU
Subject: Advice on teaching an 8 year old
To: info-hams@ucsd.edu

I know this subject comes up every few months, but I didn't think I
would need it this soon last time around.

My 8 year-old has decided that he wants to get a license so he can
play with Dad's radios, too. His stubborn determination
once he decides to do something leads me to believe he will probably

succeed. So, I need advice from those with experience in teaching young children amateur radio theory and regs. I'd like to know what worked for you and the kids you taught.

Aside from the philosophical problems (I'm an academic type, twenty years in school, three university jobs), I don't think memorizing the question pool would work for my son. He *has to* understand things.

Given the perversity of the universe, he will probably learn the code easily. I had to sweat blood over it. Suggestions on the best way to teach the code will also be appreciated.

Since this topic has been discussed recently, email replies are probably in order. If there is interest I will summarize to the net.

Thanks much,

Greg Young AC4YT
cheech@med.unc.edu

Date: Wed, 2 Jun 1993 23:18:56 GMT
From: usc!howland.reston.ans.net!agate!headwall.Stanford.EDU!Csli!kawai@network.UCSD.EDU
Subject: Advice on teaching an 8 year old
To: info-hams@ucsd.edu

AC4YT DE N6UOK

Greg, I'd suggest two strategies that work especially well with younger learners: individual instruction and exploratory learning. What this means is that you work hand-in-hand with your child in acquiring knowledge via hands-on experience. I would suggest you consider getting an "electronics experimenter's kit" for your son, such as a Radio Shack model 28-259 ($29.95) or similar. I'm not endorsing a particular brand or model; just pointing out that learning theory through experimentation works best for kids. It's important to have a knowledgeable person be close at hand to guide the child in the right direction. I had an electronics kit as a child, but no mentor nearby; that was a drawback. Your son will fare better with your presence.

Morse code should be an easy task; young children can pick up virtually any symbolic system with minimal effort. As one trained in the teaching of foreign languages, I can attest to that! The trick is to use code every day. Try talking to your son via morse code ... call it "dad's secret code" that mom can't hear! Or maybe she does -- anyway, you get the point. Kids learn fast but forget fast, too. Practice retains knowledge. Make it fun

to practice.

Good luck, and be sure to tell us your son's callsign when he gets it!

---------- Speech Research Program, SRI, Menlo Park, CA 94025-3493 USA
--- Goh Kawai --- work:(415)859-2231 fax:(415)859-5984 home:(415)323-7214
---------- internet: kawai@speech.sri.com radio: n6uok and 7l1fqe

Date: 2 Jun 1993 16:42:37 -0700
From: techbook.com!techbook.com!not-for-mail@uunet.uu.net
Subject: Buying radios without a license
To: info-hams@ucsd.edu

Derek Wills (oo7@emx.cc.utexas.edu) wrote:
: jga@dreaml.wariat.org (Jon Anhold) says:

: >>rpo@trsvax.tandy.com writes:
: >>| ...Requiring a license would eliminate being able
: >>| to purchase a rig for someone else as a gift, getting a rig
: >>| after you test but before you receive your ticket, and other
: >>| legit customers.

: >If somebody wants to purchase a radio as a gift, just ask the intended
: >receiver of the gift for a copy of liscence/csce..

: Well, then it couldn't be a surprise gift. As they (probably) say,
: "radios don't transmit, people transmit"

And "They" would be right, as when the same was said about firearms.

:- you don't want it to be
: harder to buy an HT than to buy a handgun, do you?

Heck no! Maybe it oughta be harder than to buy a CB though... :-}

How about a 7 day waiting period for Handitalkies? After all, being so
small, they must have been designed for concealed carry!
Yeah, that's the ticket!
Think of the criminal applications!
Call your CongressCriminal and demand a ban on those concealable
"assault radios".

NOT!!

: Derek "I am definitely not the NRA" Wills (AA5BT, G3NMX)

: Department of Astronomy, University of Texas,
: Austin TX 78712. (512-471-1392)
: oo7@astro.as.utexas.edu

Gene "I support ALL of the Constitution" Wolford

The ARRL fights for my radio privileges.

The NRA protects my Second Amendment rights!
 ^^^^^^

--
 Those who beat their swords into plowshares
 are destined to plow for those who don't.
 genew@techbook.COM
Please direct flames to: genew@ucant.gethere.frmhere

Date: Wed, 2 Jun 1993 17:51:49 EST
From: anomaly.sbs.com!kd1nr!news@uunet.uu.net
Subject: Call Sign Server, Where?
To: info-hams@ucsd.edu

levine@mc.com (Bob Levine) writes:

> I tried the 2 servers listed and they worked fine, however the databases
> are way out of date. Dec 1991 I think they both were. I got this call
> in the mail on Jan 14, 1992 and it was not listed in either.
>
> callbook@sat.datapoint.com
> callsign.cs.buffalo.edu 2000

There's also ham.njit.edu 2000 ...

But I find it peculiar that you got your call on 01-14-92 and weren't
able to find your record, while mine came through in June of 92 and I'm
in there under my old call. The new one, well, I don't think so but I do
hear the databases get updated yearly around June or July. So that means
it SHOULD make it. :)

Tony

 Tony Pelliccio kd1nr/ae
 !!*!*!*!*!*!*!*!*!*!*
 system@garlic.sbs.com

"Usenet is like a herd of performing elephants with diarrhea -- massive, difficult to redirect, awe-inspiring, entertaining, and a source of mind-boggling amounts of excrement when you least expect it." --spaf (1992)

Date: 2 Jun 93 17:04:34 EST
From: titan.ksc.nasa.gov!k4dii.ksc.nasa.gov!user@ames.arpa
Subject: Generate SSB using combined AM/FM?
To: info-hams@ucsd.edu

In article <btobackC7yn4y.Lu@netcom.com>, btoback@netcom.com (Bruce Toback) wrote:
> In the ARRL publication "Solid State Design for the Radio Amateur," reference
> is made to generating an SSB signal by combining AM and FM: "...it may
> be shown mathematically that a carrier which is amplitude modulated properly
> and frequency modulated simultaneously will yield a single-sideband output."

Bruce-

While I've never heard of this, I was aware that either an AM signal or an NBFM signal, can be detected as if it were an SSB signal. Therefore, I would expect that a low level AM or NBFM signal could be passed through an SSB filter, to produce an SSB signal. The limitation is that real filters would not have adequate carrier rejection to produce SSB/Suppressed Carrier.

Early methods of producing SSB/Suppressed Carrier, involved combining the carrier and voice, with both voice and carrier signals phase-shifted 90 degrees. The voice phase-shift network was somewhat of a compromise, since it had to cover the 300 to 3000 Hz range. This phase-shift modulation scheme produced SSB/Suppressed Carrier, without using a filter.

While the phasing method hasn't been widely used in more modern times, its limitations may have been due to the technology that was current when it was developed. If newer methods could be applied to make it practical, there might be immediate applications in miniaturized transceivers.

With regard to the ARRL reference, I wonder if the resulting SSB signal has much carrier suppression? If it is related to the phasing method, it just might be the "newer method" needed to do the job.

fred-mckenzie@ksc.nasa.gov

Date: 2 Jun 1993 23:25:57 GMT
From: swrinde!gatech!asuvax!chnews!news@network.UCSD.EDU
Subject: HTX-202 mods
To: info-hams@ucsd.edu

In article <1993Jun2.142505.26737@rsg1.er.usgs.gov> tbodoh@resdgs1.er.usgs.gov (Tom Bodoh) writes:

>It would be interesting to try the duckie from another brand of HT to see if
>the birdie moves or goes away altogether...

I tried it with three different duckies. The better the ducky, the better the birdie.

Jim, W5GYJ

Date: 2 Jun 93 07:52:52 EDT
From: usc!math.ohio-state.edu!darwin.sura.net!udel!news.intercon.com!psinntp!arrl.org@network.UCSD.EDU
Subject: IC 271/471 vs IC 275/475 Performance Question
To: info-hams@ucsd.edu

In rec.radio.amateur.misc, gary@ke4zv.uucp (Gary Coffman) writes:
>In article <1537@arrl.org> zlau@arrl.org (Zack Lau) writes:
>>
>>I've measured a IC-251A and its similar to the IC-202/402. The noise figure
>>is around 6 dB and the dynamic range is 75 dB. (-134.5 dBm MDS).
>
>Side note: I also have the IC-202/402 portables. Do you use the internal
>batteries, or do you run them off an external gel cell to save weight?

I've never used the internal batteries. I recently got lots of wet Nicads (5 x 12.5V x 11 AH)--just in case I decide to run portable EME with a TWTA. For hiking trips I use one or two 4AH Nicads, but also have an RV battery and 15 AH gell cells. One set of Nicads holds down the paddle and the memory keyer. A minor problem with the setup is that even 25 wpm is a bit fast for your average VHF type, though I have heard 30+ wpm on 10 GHz.

>I've started doing the latter, with the gell cell running the amp and
>the computer too. It's a *big* gell cell that helps anchor the antenna
>tripod.
>
>>The Dec 1978 QST has a product review of the IC-211. The sensitivity was

>>measured at .14 uV for 10 dB S+N/N. This was in the period in which the
>>lab was just beginning to get decent test equipment.
>
>Well, if I didn't screw up the math, always a possiblility with me,
>then .14uV across 50 ohms is -124.067 dbm, call it -124. With that
>for a 10 db S+N/N, and assuming linearity, then the MDS of the 211
>should be around -134 dbm, about the same as the 251A. That matches
>with my experience. With a dynamic range of 75 db, that leads to

Wrong formula--two tone DR is 2/3 (input intercept-MDS)

>an intercept of -59.5 dbm for the 251A. That's truly awful, and

Intercept is -22 dBm, or 2 dB *better* than the FT-736 we measured
in the ARRL Lab.

>my experience says the 211 is worse. The SBL-1 used on the Mutek
>board has a rated intercept of around +5 dbm (my books aren't

Actually, you can get +15 dBm, though +5 wouldn't be unusual.
You can easily *lose* 15 dB by not watching the IF termination.

>handy, but that's in the ballpark). The BFxxx used on the Mutek
>board doesn't have anywhere near 64 db of gain. I don't have a
>spec on that circuit, but I'd guess it's around 15-20 db. So
>I'd guess that the intercept of the 211 with Mutek board would
>be on the order of -10 to -15 dbm. That's pretty strong for a
>VHF rig. Other factors may limit it to less than that, but they'd
>be common with the older circuitry. So it looks like the Mutek
>board buys about 44 db more dynamic range. This may be the wrong
>way to calculate this, Zack you can critique.
>
>>This doesn't address the problem that most really low noise figure
>>preamps have way too much gain--20 or 23 dB isn't unusual. One solution
>>is to hack out the gain in front of the mixer, which isn't for everyone.
>
>I've thought a bit about this. One obvious, but not too bright way to
>tame the preamp is to put a pad in it's output. But it seems to me
>that you could design the preamp to have less gain without hurting
>it's noise figure. Is this true, or do you have to optimize for
>noise figure and take whatever gain you get?

Depends how much work you are willing to do. There are undoubtedly
feedback configurations that will help, especially if you start
looking at multiple transistor designs. I haven't really looked
at this yet--20 dB of gain is actually about right if you are
designing a single conversion high performance *transceiver*.
What makes it tough is that even cheap GaAs FETs like the MGF 1302

have plenty of gain, even at 10 GHz. Thus, you probably have do
design it like a *microwave* circuit, to really get the best
performance. Casual design can result in the circuit *almost* working.
It might be fine 99% of the time, but it might do weird things when
hooked up to certain antennas, for instance.

>>This neglects the issue of what you really need. Sure, a noisy
>>PLL rig is 40 dB worse than a good rig in terms of ultimate
>>signal to noise ratio. But is this important if all you ever
>>hear is the satellite (the transponders aren't noted for S/N radio--
>>though most designers aren't faced with all the restrictions you have
>>up in Space). Terrestrial interference can certainly be a problem--but
>>a better receiver isn't the only solution. 432 EME has been made much
>>easier by cleaning up antenna patterns. Perhaps the same might
>>be true for satellite work.
>
>With the Mutek equipped 211, and an ARR GASFET at the antenna, a KLM22C,
>I could watch the spin modulation of the noise floor of the transponder
>pump the S meter on the 211. That's as good as it gets since the
>transponder noise floor becomes the limiting factor.
>
>I used to do another cheat, I took the scope output of the 211, IF
>frequency, and fed it to a IC745 in general coverage mode. This let
>me use the narrow filters in the 745 to get another effective NF

This depends on the operator. I notice that I don't get an improvement
with a narrow bandwidth receiver. But, I also enjoy operating the CW
Sweepstakes with a 2 kHz wide filter. What this means is that I have
an ear trained to pick out whichever CW station I want, rather than
letting the receiver do it for me. I'd guess that I can effectively
narrow the bandwidth to 100 Hz.

>improvement. Now, the FT736R already has the narrow filters available.
>One thing that limits the noise floor of the transponder is the
>bandwidth it has. A 200 kHz wide receiver isn't going to have the
>NF of a narrow rig.

Actually, for a first approximation, noise figure is independent of
bandwidth. This is why I guessed at the noise figure of the 251E/Mutek.
The radio had an unusually narrow bandwidth--you might even say it
was optimized for EME work :-). The reviewer, to his credit, picked
up on this and reported the bandwidths, expecting the reader to actually
read the review, and not rely on blind numbers. It could be that the
new mixer is mismatching the IF filter, causing the poor filter shape.

Our approach with such problems is generally to give the manufacturer
an opportunity to fix them. I suspect there is a difference in response
before and after product reviews with some companies. I don't know about

the UK, but such a narrow filter would be a real problem for many people.
(350 Hz 3 dB BW)

Zack Lau KH6CP/1

Internet: zlau@arrl.org "Working" on 24 GHz SSB/CW gear
Operating Interests: 10 GHz CW/SSB/FM
US Mail: c/o ARRL Lab 80/40/20 CW
225 Main Street Station capability: QRP, 1.8 MHz to 10 GHz
Newington CT 06111 modes: CW/SSB/FM/packet
amtor/baudot
Phone (if you really have to): 203-666-1541

Date: 2 Jun 1993 22:35:20 GMT
From: usc!howland.reston.ans.net!darwin.sura.net!bogus.sura.net!news-feed-1.peachnet.edu!concert!lester.appstate.edu!usenet@network.UCSD.EDU
Subject: radar gun license
To: info-hams@ucsd.edu

In <1993Jun2.201806.18268@kd4nc.uucp> n4tii@kd4nc.uucp writes:

> lrk@k5qwb.lonestar.org (Mr. Lyn R. Kennedy) writes:
>
> >Ttile 47 CFR 90.19(g)(6)
> >(under Police Radio Service)
>
> >A licensee of a radio station in this service may operate radio units
> >for the purpose of determining distance, direction, speed, or position
> >by means of radiolocation device on any frequency available for
> >radiolocation purposes without specific authorization from the
> >Commission, provided (the right equipment, etc).....

> So basically, the previous posts under this topic have been incorrect...
> or what? All the previous followups have said that one had to have a
> specific radar license for it...
>
> What's the deal here? Do we (PD's) need it or not?

The posting concerning no separate, special license for radar is correct.

If an eligible licensee in the Public Safety services (Local Government, Police, Fire, Highway Maintenance, Forestry-Conservation but not Special Emergency) has a valid license for its normal two-way radio system, there is no requirement for a separate license for speed determining equipment. However, the speed determining equipment must conform to the type acceptance rules.

The no separate license would not cover a business or would it allow non-type accepted equipment (except for some grandfathered equipment).

Marv Hoffman, KD4EGV
Appalachian State University
Boone, NC

Date: Wed, 2 Jun 1993 23:57:08 GMT
From: swrinde!gatech!howland.reston.ans.net!ux1.cso.uiuc.edu!moe.ksu.ksu.edu!crcnis1.unl.edu!news.unomaha.edu!cwis.unomaha.edu!pschleck@network.UCSD.EDU
Subject: Readership Report for the Radio-Related Usenet Newsgroups
To: info-hams@ucsd.edu

The following is reprinted from news.lists, with only the radio-related newsgroups (and the first newsgroup for comparison) included.

>From: reid@decwrl.DEC.COM (Brian Reid)
>Newsgroups: news.lists
>Subject: USENET Readership report for May 93
>Date: 2 Jun 1993 13:57:11 GMT
>Organization: DEC Network Systems Laboratory
>Summary: data for all groups
>Keywords: arbitron, statistics, full

This is the full set of data from the USENET readership report for May 93. Explanations of the figures are in a companion posting.

```
        +-- Estimated total number of people who read the group, worldwide.
        |     +-- Actual number of readers in sampled population
        |     |     +-- Propagation: how many sites receive this group at all
        |     |     |    +-- Recent traffic (messages per month)
        |     |     |    |      +-- Recent traffic (kilobytes per month)
        |     |     |    |      |    +-- Crossposting percentage
        |     |     |    |      |    |    +-- Cost ratio: $US/month/rdr
        |     |     |    |      |    |    |      +-- Share: % of newsrders
        |     |     |    |      |    |    |      |   who read this group.
        V     V     V    V      V    V    V      V
   1 230000 4611  92%    1    13.6 100%  0.00 10.0%  news.announce.newusers
```

315	41000	810	76%	1861	4028.8	6%	0.13	1.8%	rec.radio.amateur.misc
341	40000	782	78%	527	1189.6	9%	0.04	1.7%	rec.radio.shortwave
503	32000	636	74%	305	342.6	6%	0.01	1.4%	rec.radio.swap
623	28000	557	75%	246	398.4	6%	0.02	1.2%	rec.radio.amateur.packet
753	25000	492	59%	491	873.2	5%	0.03	1.1%	alt.radio.scanner
913	21000	412	75%	12	23.5	17%	0.00	0.9%	rec.radio.noncomm
923	21000	404	74%	401	848.0	2%	0.05	0.9%	rec.radio.amateur.policy
962	20000	386	62%	132	815.0	3%	0.04	0.8%	rec.radio.info
1037	18000	355	73%	84	182.7	6%	0.01	0.8%	rec.radio.cb
1252	14000	278	49%	84	109.1	1%	0.01	0.6%	alt.radio.pirate
1271	14000	273	63%	156	403.3	5%	0.03	0.6%	rec.radio.broadcasting
1715	7700	152	36%	7	8.4	14%	0.00	0.3%	rec.ham-radio
1725	7600	150	35%	7	8.6	14%	0.00	0.3%	rec.ham-radio.swap
2083	2500	49	16%	61	123.2	58%	0.01	0.1%	aus.radio

Several positive trends continue this month. Readership counts are
up in all newsgroups. The moderated newsgroup rec.radio.info continues
to be carried at more sites. It has overtaken rec.radio.cb, and is now
almost tied with rec.radio.amateur.policy and rec.radio.noncomm.

On the negative side, rec.radio.amateur.misc continues to have an
extremely high cost on a per-user/per-month basis. Bad news for
convincing news administrators who pay for news to carry it. Also, the
defunct rec.ham-radio hierarchy reappears this month. If these
newsgroups are still active at your site, please try to persuade your
news administrators to delete them as these groups have been rendered
obsolete (for about 2 1/2 years now) by the rec.radio.amateur hierarchy.

73, Paul W. Schleck, KD3FU

pschleck@unomaha.edu

Date: Tue, 1 Jun 1993 18:00:35 GMT
From: dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!xlink.net!
math.fu-berlin.de!mailgzrz.TU-Berlin.DE!news.netmbx.de!Germany.EU.net!mcsun!
sun4nl!bsoatr!bsrofa!rob@network.UCSD.
Subject: Splatter (was: Signal report etiquette)
To: info-hams@ucsd.edu

Jay Kesterson K0GU (jayk@fc.hp.com) wrote:
: >>I've been on 10m (SSB) for a little over a month now, and several times I have
: >>had problems hearing weak signals because of splatter from DX stations much,
: >>much more than 3KHz away.

: >How would you like someone to deliver the same information to you?

: >Tell him that way.
: >
: >Before you do -- make sure you know that it's him and
: >not you. Ask the other station you're working if they also hear him.
: >You might have a problem with your station. Try putting your attenuator
: >in -- he might be overloading you. Put your tight filter in. Make sure
: >he's really being a problem before complaining, then complain in gentle
: >terms. Be prepared for a nasty rebuff and handle it well if it comes.
: >You've just done everything you can do. Relax and let it go at that.

: The above paragraph gives lots of good advice. Use the attenuator on
: loud stations. Also make sure your noise blanker is turned off. Most
: blankers cause splatter, in your receiver, from loud stations that are
: much more than three kHz away.

Also bad local oscillators cause nasty effect...

Robert PA2JOB.
--

Robert Faass Email: rob@bsrofa.atr.bso.nl

Date: Tue, 1 Jun 1993 18:27:54 GMT
From: pravda.sdsc.edu!news.cerf.net!usc!howland.reston.ans.net!torn!nott!bnrgate!
bnr.co.uk!uknet!mcsun!sun4nl!bsoatr!bsrofa!rob@network.UCSD.EDU
Subject: VCO design questions
To: info-hams@ucsd.edu

Glenn Elmore (glenne@sr.hp.com) wrote:
: Alan Bloom (alanb@sr.hp.com) wrote:

references:

1 Digital PLL Frequency Synthesizers, Theory and Design,
 U. L. Rohde, 1983, ISBN 0-13-214239-2

2 HP Application note 150-1, 1989

If you cant measure it (the sideband noise) go for the following:

a vary the supply of the vco, the less insensitive to the
 variation, the less noise will be there...

b supply the varicap with a low impedance (instaed of a 100 k as I have seen in some designs, it makes it at least 10 dB worse)

c the noise impedance match is far less important as a and b.

Robert, PA2JOB.
--

Robert Faass Email: rob@bsrofa.atr.bso.nl

Date: Wed, 2 Jun 1993 21:02:56 GMT
From: usc!howland.reston.ans.net!ux1.cso.uiuc.edu!uwm.edu!linac!att!att-out!cbnewsl!dara@network.UCSD.EDU
Subject: Velocity of light
To: info-hams@ucsd.edu

In article <9306021339.AA02237@tix.timeplex.com>, taylor@tix.timeplex.COM (Seth Taylor) writes:
> Although this question is a little removed from ham radio, but still
> related to the subject(radio signals travel at the velocity of light in
> free space), Does anyone out there know why Einstein used the term
> c in the famous equation, E = mc(squared), where c = velocity of
> light (300,000 mtrs/sec) ??
> Seth T. KC2WE

Seth: you gave the wrong velocity (already corrected by others) and the energy of a mass at rest. Actually energy is the sum of potential energy and Kinetic energy so the true general equation is
E = mc^2 + 1/2mv^2. (Kinetic energy is 1/2 mass x velocity squared)
Einstein showed that mass and length and velocity are relativistic, i.e. there's a term which is related to the ratio of velocity^2 over c^2. so mass becomes m over square root of (1-v^2/c^2).
So the general equation for E = mc^2 / (1-v^2/c^2) ^(1/2).
If you expand and approximate you get E = mc^2 + 1/2 mv^2.
Now, what was your question? (Einstein's relationship makes relativity, and conservation of energy work for all velocities ---I think he had several false starts like E= mx^2 but none of those initial tries looked right!)Einstein came up with this real great definition which not only looked like old fashioned energy (mass and velocity squared) and also fit his brand new theories and worked in the real world!
That last part is what most of us have trouble with.
Shel WA2UBK

Date: 3 Jun 1993 00:06:09 GMT

From: swrinde!cs.utexas.edu!math.ohio-state.edu!caen!saimiri.primate.wisc.edu!
usenet.coe.montana.edu!netnews.nwnet.net!news.uoregon.edu!
systems%ns.uoregon.edu@network.UCSD.EDU
Subject: Velocity of light
To: info-hams@ucsd.edu

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> > Seth T. KC2WE
>
Issac Asimov (god I miss his writing:-()wrote a essay many years ago called
"c is for celeretas" (sp?) In it he described Albert's quest for his relativity
theory. It is latin for speed I believe. The word Acceleration is derived
from this.
Jeff Hite KF7SZ
jeffh@ludwig.cc.uoregon.edu

Date: Wed, 2 Jun 1993 17:59:42 EST
From: anomaly.sbs.com!kd1nr!news@uunet.uu.net
To: info-hams@ucsd.edu

References <1993May31.235517.20113@w8hd.org>,
<930601.154656.7V0.rusnews.w165w@garlic.sbs.com>, <1993Jun2.133710.29245@w8hd.org>
Subject : Re: Warning! FT5200 DANGER!

kenh@w8hd.org (Ken Hoehn) writes:

> system@garlic.sbs.com (Tony Pelliccio) writes:
>
>
>>Well, there are two lessons to be learned from this. One, never leave
>>the radio on in your car. Two, there's a modification for the MW-1 that
>>will only let the radio key up when it receives both the 49MHz signal
>>and an infrared command from the MW-1 remote. I think they list it in
>>the users manual for the MW-1. By the way, are you pleased with the way
>>the MW-1 works? I sent mine back after three days. It was a piece of
>>junk.
>
>>Tony
>
> I'm aware of the mod, Tony, but it makes the unit quite intermittant in

> normal operation.
>
> I have a love-hate relationship with the unit...the audio stinks, but it
> sure is convenient, and safer, to operate the radio while driving.

Do what I did with it, send it back and get your money for something more useful. The audio from the unit does indeed rot, not to mention any old 49MHz source tripping the xmitter. When I got mine I tested it out in the house first and I realized as soon as I plugged the remote unit into the radio, the radio would key up. That's when I made the modification. But even in the car, people kept telling me my audio was extremely weak. I tested the battery out, it was fine. The unit is just a piece of crap, plain and simple. As for safety, what factors of the MW-1 contribute to that? I mean, yes you can adjust things like volume, squelch, balance, and most importantly change bands. I don't know if this exists on the 5200 but on the 5100 (a much better radio in my opinion. But why didn't they make it with detachable face?) you can remove a jumper so that the d/mr switch on the mic becomes a band switch. VERY convenient. Even Yaesu strongly recommends this modification. If that's the case, why the heck don't they market the radio like that?

Oh well, I'll get down off the soapbox.

Tony

Tony Pelliccio kd1nr/ae
!!*!*!*!*!*!*!*!*!*
system@garlic.sbs.com

"Usenet is like a herd of performing elephants with diarrhea -- massive, difficult to redirect, awe-inspiring, entertaining, and a source of mind-boggling amounts of excrement when you least expect it." --spaf (1992)

Date: Wed, 2 Jun 1993 22:37:30 GMT
From: usc!howland.reston.ans.net!agate!news.ucdavis.edu!othello.ucdavis.edu!ez006683@network.UCSD.EDU
To: info-hams@ucsd.edu

References <1993May31.235517.20113@w8hd.org>, <930601.154656.7V0.rusnews.w165w@garlic.sbs.com>, <12177@prijat.cs.uofs.edu>
Subject : Re: Warning! FT5200 DANGER!

Bill Gunshannon (bill@triangle.cs.uofs.edu) wrote:
: Excuse me for being obtuse, but if this is for use with an Amateur Radio Xcvr
: why didn't thye just use a frequency a couple of Mhz higher?? No interference
: from 49 Mhz devices and you already have a license for 6 meters!!

: Kinda makes you wonder who designs this stuff, doesn't it??

My guess is that the same mic. is used for radios designed for other services.

Dan
--

--
* Daniel D. Todd Packet: KC6UUD@WA6RDH.#nocal.ca.usa *
* Internet: DDTODD@ucdavis.edu *
* Snail Mail: 1750 Hanover #102 *
* Davis CA 95616 *
--
* I do not speak for the University of California.... *
* and it sure as hell doesn't speak for me!! *
--

End of Info-Hams Digest V93 #673
